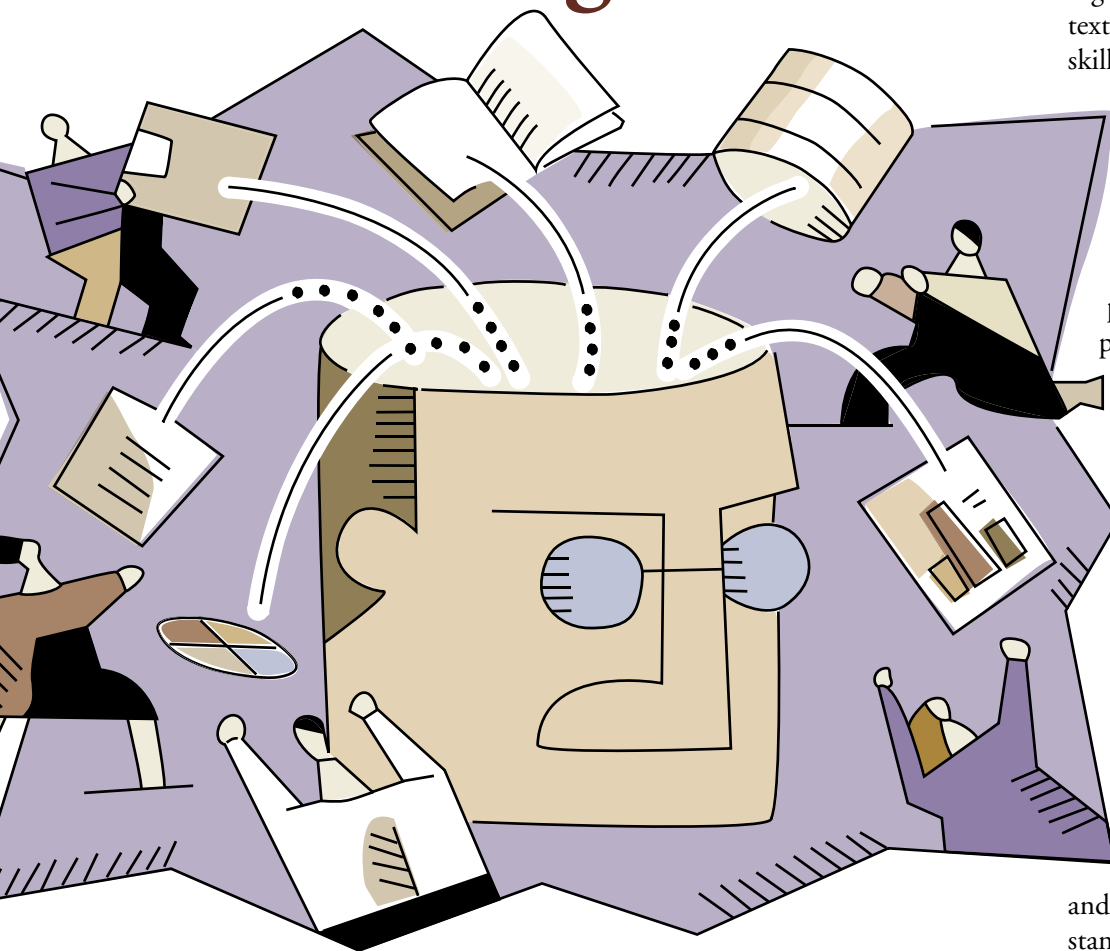


# Preparing for the Data Deluge



NCLB and data-driven decision making require educators not only to collect assessments but to be able to manage them. Getting ready for the challenge can be the hardest part.

*By Don Hall*

**C**an public education succeed in the Information Age without creating a culture where data drives decision making with timeliness and impact? Today's educators are data rich but information poor. The No Child Left Behind (NCLB) train seems to roll across the educational landscape like a juggernaut leaving its tracks on everything

it touches. Yet the question still remains, "How will a school district develop an intentional approach to data management and the selection of enterprise tools to support effective decision making?" In the course of this article, I will investigate some of the key issues educators must consider when they try to tackle this concern.

## Context for Understanding

One thing we are very good at doing in public education is counting "things." We can count kids, textbooks, and trashcans with great skill and precision. Often we have

honed this to an art form even without advanced tools of automation, thereby developing a culture of counting inputs.

Far too often, it gets translated into our instructional assessment practices as well. Up to now, this practice has defined accountability for many educators and parents.

In a climate of increased scrutiny on performance and justifying limited resources, the pressure for increased accountability takes on a new form and urgency for educators. One could easily say NCLB is not really that big a departure from the past except that it receives more media attention. Although this may be partly true, today the accountability measures associated with NCLB are more numerous and more difficult to collect

and understand. Because they are standards-based, they strongly focus on outputs instead of inputs, forcing us to shift the focus for our data collection strategies. Many traditional assessment measures simply will not work now.

NCLB also calls for a new type of data management and reporting system for schools and districts. These tools are large in scope and often complex to deploy. The selection process itself can be one of the most difficult parts for the project. The take away for a school district should be "this is not a simple issue," and any vendor that comes to you claiming to have one should be dealt with carefully.

## Outcomes Matter

Once your organization decides to tackle this type of issue, the question usually becomes “what tool set should we use?” or “who should we partner with?” However, I would propose this is often where school districts make their first mistake. It is not about the tool or vendor. It is about you and what you are trying to achieve—your outcomes. Unless you have a structured decision-making process, the adoption of any enterprise-level tool will become one of the most costly and frustrating projects you will enter into. In reality, you need to formalize your decision-making cycle to avoid what I call *biditis*. Biditis is the commonly contagious condition in the public sector where voluminous documents are written that few understand, few bid on, the low price wins, and the final product is usually a surprise to all involved.

## Formalize the Cycle

How does a district begin the process for identifying its selection strategy for an enterprise tool? Prior to beginning the selection process, one of the most important things a district can do is to define its decision-cycle methodology.

Many complex IT projects fail because they do not use a structured process to map out the organizational requirements prior to final vendor selection. The more complex or comprehensive the application, the more important this step is to its successful implementation.

Far too often, school districts find themselves in the positions of merely evaluating one or more products and trying to decide on the fly which one seems to be the best fit. Without performing due diligence to identify the key elements necessary for the

software application, they are at the mercy of the software vendor. So what does a typical structured decision cycle look like?

1. *Define the project goals.* Define the mission, specific need(s) you are trying to address, and desired result(s) you anticipate from a successful implementation. Ask yourself, “What are we doing and why is it important to do this now?”
2. *Define the project requirements.* Define the specific requirements necessary to achieve the goals of the project. Ask yourself, “What must be done to be successful?”
3. *Define the user community.* Clearly define who the end user will be for the project, both short and long term. Make sure to consider the full spectrum of users—internal and external.
4. *Define functional requirements.* Define what functionality will achieve the goals. What minimum features must it have to meet your goals. What features are truly optional, and which are non-negotiable?
5. *Determine a master list of vendors.* Determine the vendors who most closely align the functional requirements and capabilities you have already identified.
6. *Define business and technology criteria.* Identify what other factors need to be considered in the selection process prior to meeting with vendors. For example, company stability, budget limits, technology requirements, or standards.
7. *Evaluate and select a vendor.* Fully evaluate vendors based on your business and technology criteria, and then select one. This evaluation should include a proof of concept to assess and validate the

vendor solution. This step helps you determine if this product is the one for your organization.

Also identify to what degree each factor will affect the final decision. Will you weight the various factors? This understanding will be important because various companies will be strong in different areas.

## Cautions

This model is adapted from an approach commonly used in the private sector. However, we must consider some of the unique aspects of public education for it to work well for your organization.

1. Make sure to involve the right levels of stakeholders early enough in the process. Do not wait until the end. They should be involved from the very first step.
2. Realize your school district’s ability to accept this level of change is probably much slower than what the vendor is ready to place upon you. Businesses regularly make large-scale change in terms of days or weeks. For schools, it can take months or years.
3. Clearly define the difference between a want and need. In the private sector, money is less of a constraint if it can show a good return on investment (ROI). However, in public education that is definitely not the case. So we end up making lots of trade offs in functions and features. Make sure you know which ones are the deal breakers for your organization before you ever see any product.

## Create an Evaluation Process

When we began the selection process for our data management system, we followed the process outlined above.

However there were a couple of specific things we did differently that I would like to share.

**Let Us Do It.** When we did the technology testing phase (Step 7), we requested the final three vendors to install a proof of concept database using our data, but our engineers and applications team had to be the ones installing it under the guidance of their resource people.

This was done to give our team a feel for how difficult it would be when the resource experts were not around later. Even though they were still over our shoulder watching and guiding, it was a much better way of testing the complexity of getting the system up and running.

This method also gave us a way to collect time logs on how long various tasks would take for building project plans when we got ready for project implementation. If the experts did it, we would not be able to accurately assess how long each step would then take for our team.

**How Easy Is It—Really?** Another technique we used in evaluation—which really drove the vendors crazy—was during the stakeholder evaluation of the product. We brought in the advisory team composed of various central office and building-level staff to a training lab for a full day. No vendors were present, and none was permitted to give any demonstration of the product at this time to the user group.

We had designed some basic tasks for everyone to try to complete with some minimal instruction from one of our staff members. We had a scoring rubric for each of the final three products around the same characteristics for each task and some other affective-type response questions. We then asked users to try to complete the tasks with some staff helpers assisting.

The goal here was simple—no pun intended. How simple was the ap-

plication to use? One of the critical factors to the effective adoption of any enterprise tool is ease of use. If it is not easy to use, users will not take their valuable time to learn it. So this environment was specifically designed to see how intuitive the three tools were with some basic instruction on some common tasks. By having users go through all three tools at the same time for the same tasks, they could quickly compare and contrast the relative strengths and weaknesses.

The response from the user group was overwhelmingly positive to the experience. It also became apparent very quickly which products were easy to use and which ones were not. If this same thing had been done in a canned vendor demonstration, we are confident the results would not have been the same.

### Factors to Consider

Once you begin the product evaluation cycle, you should use certain guiding principles to construct an evaluation rubric that you will use with each product solution. This provides you a way to more objectively evaluate each product against the values and features that are important to you instead of what the vendor is able to demonstrate or highlight.

You should consider these strategic variables for any production solution:

- Scalability
- Standards-Based
- Adaptable/Flexible
- Supportable (technical, professional development, application production interface)
- Empowering Users
- Affordable (Total Cost of Ownership)

The specific features or functions to include in your rubric come from the analysis you did during Step 4 of your decision-making cycle. This step is important because it helps you focus on what was really important

to your district or school, instead of what the vendor feels is important to you.

### Summary

Imagine that all the dust has settled from the massive project management planning, evaluation, selection, and implementation. You will have learned a ton of lessons—some very positive and others that gave you a few more gray hairs. So wouldn't it be nice to know some of them now? Here is my Rule of 5:

1. Know what you want to accomplish in specific, measurable terms.
2. Know in advance what you can afford to implement—short and long term.
3. Know exactly who you are targeting to serve with the solution.
4. Know how you will respond when parents ask for access because they will.
5. Know what you will do with the truth—the scariest of the five.

Although we live in a time where accountability has become the mantra for public policy, we should not forget we must privately hold the charge for ensuring that every student is successful in our schools. After all, we have been saying for decades that all students can learn. Maybe this will be our professional opportunity to step up and show we were right.



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